REMARKS

Reconsideration of the application in light of the above amendments and the following remarks is respectfully requested. Claims 1-13 have been amended. Claims 1-13 are pending.

§101 Rejection

Paragraph 2 rejected claims 1-13 under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Claims 1-13 have been amended to recite that the vehicle detector includes "a processor", and to recite that the claimed methods comprise "the processor implemented steps of . . .." Support for the amended claim language can be found in Figure 1, wherein the processor is identified by reference numeral 20, and throughout the specification, where it says that the processor performs many of the process steps (see, for example, page 4, lines 29-30: "The overall operation of vehicle detector 10 is controlled by processor 20").

In addition, independent claims 1, 5, 7-11 and 13 have been amended to recite that the claimed process steps combine to affect something physical, namely, that the claimed process steps result in the adaptation of the vehicle detector to changing conditions. For example, in claims 1-6, the vehicle detector is adapted to environmental changes. In claims 7-8, environmental changes which affect the vehicle detector, such as temperature and humidity, are identified. In claims 9-10 mechanical difficulties which affect the vehicle detector are identified. In claims 11-13, the vehicle detector is adapted to drift in the frequency of the oscillator signal.

In light of the above described amendments, Applicant submits that the claims as currently presented recite specific operational steps that are implemented by a computer. In accordance with the Proposed Examination Guidelines for Computer-Implemented Inventions, Section I.B.(c)(iii), a series of specific operational steps to be performed on or with the aid of a computer is a statutory process. Therefore, Applicant respectfully submits that the invention as claimed is directed to statutory subject matter, and respectfully requests that the rejection under 35 U.S.C. §101 be withdrawn.

§112 First Paragraph

The specification under 35 U.S.C. §112, first paragraph for failing to provide an enabling disclosure. Claims 1-13 under 35 U.S.C. §112, first paragraph for the same reasons set forth in the objection to the specification. Applicant respectfully traverses these rejections.

Applicant respectfully submits that the specification and drawings are sufficient to enable one of ordinary skill in the art at the time the invention was made to make and use the invention. Although no flow charts detailing the specific process steps are shown, one of ordinary skill in the art at the time the invention was made would have been able to make and use the invention given the apparatus shown in the drawings and the detailed description of the process steps given in the text. The drawings show the apparatus that performs the claimed methods. The specification, referring to the drawings, gives a detailed explanation of how the process steps are carried out. Given this detailed description and the drawing figures, flow charts would not be necessary to teach one of ordinary skill in the art at the time the invention was made how to make and use the invention.

For example, as per claim 1, the step of "monitoring the oscillator signal" is described at page 6, line 26 through page 7, line 20; the step of "detecting entry" is described at page 8, line 4 through page 9, line 27; "determining the speed" is described at page 10, lines 1-4; "calculating a time" is described at page 10, lines 6-10; "producing a sample measurement value" is described at page 10, lines 10-14; "comparing" is described at page 10, line 10 through page 11, line 4; "adjusting the reference value" is described at page 11, lines 5-18.

As per claim 2, the specific method for calculating the vehicle speed is described at page 9, line 11 through page 10, line 4.

As per claim 3, the threshold is described at page 11, lines 5-18.

As per claim 4, that step is detailed by the formula and description at page 10, line 4 through page 11, line 4.

As per claims 5-6, see the similar process steps in claims 1-4.

As per claim 7 (and similarly claim 8), the step of "measuring inductance of a dummy sensor" is described at page 11, lines 19-25; the "comparing" and "determining" steps are described at page 11, lines 25-28; "identifying is described at page 11, line 29 through page 12, line 17.

As per claim 9 (and similarly claim 10), the threshold rate of change is described at page 13, lines 18-23; "calculating a time rate of change in inductance" is described at page 12, line 18 through page 13, line 17; "identifying mechanical difficulties" is described at page 13, line 18 through page 14, line 3.

As per claims 11-13, the process steps therein can be found at page 14, line 4 through page 16, line 5.

Because the above cited passages in the text and corresponding references to the drawings explicitly describe the claimed process steps and how they are carried

out, the disclosure and claims are fully enabling and Applicant respectfully requests that the rejections under 35 U.S.C. §112, first paragraph, be withdrawn.

Obvious-type Double Patenting Rejection

Paragraph 5 of the Office Action rejected claims 1-13 under the judicially created doctrine of obvious-type double patenting as being unpatentable over claims 1-17 of U.S. Patent Number 5,728,555 (hereinafter Hoekman '555). Applicant respectfully traverses this rejection.

The Office Action says that because the claimed invention and Hoekman '555 have various calculations performed by the same processor, and include the same structural elements, the present claims are not patentably distinct because "programming of a processor does not constitute and inventive step".

Applicant respectfully disagrees. The present claims are directed to methods for adapting a vehicle detector to changing environmental or mechanical conditions. For example, claims 1-6 are directed at methods to adapt the vehicle detector to environmental changes. Claims 7 and 8 are directed at methods to identify environmental changes, such as temperature and humidity, which affect the vehicle detector. Claims 9 and 10 are directed to a method for identifying mechanical difficulties with the vehicle detector. Claims 11-13 are directed to methods for adapting the vehicle detector to drift in the oscillator signal.

In contrast, method claims 1-17 of Hoekman '555 are concerned only with methods for detecting vehicles (e.g., claim 1, 5-7), methods for determining vehicle speed (e.g., claims 2,8-10, 13-17), detection of multiple vehicles (e.g., claims 3, 11, 14) and determination of vehicle length (e.g., claims 4 and 12). None of claims 1-17 of Hoekman '555 teach or suggest any of the methods for adapting a vehicle detector to changing conditions such as those recited in present claims 1-13.

Applicant therefore respectfully requests that the rejection of claims 1-13 under the judicially created doctrine of obvious-type double patenting over claims 1-17 of Hoekman '555 be withdrawn.

CONCLUSION

In light of the above amendments and remarks, Applicant respectfully submits that the claims as amended are in condition for allowance. Applicant therefore respectfully requests a favorable Action on the merits.

Please direct any inquiries to Kari H. Bartingale at (612) 736-7176.

Respectfully submitted,

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